cyanide catalysis and wherein the reaction of the alkylene oxides onto the H-functional initiator substances is carried out in the presence of at least one metal salt of the formula

$M^{(A+)}{}_aX^{(B-)}{}_b$, where

M is selected from at least one of $Li^+$, $Na^+$, $K^+$, $Rb^+$, $Cs^+$, $Be^{2+}$, $Mg^{2+}$, $Ca^{2+}$, $Sr^{2+}$, and $Ba^{2+}$,

X is selected from at least one of $F^-$, $Cl^-$, $ClO^-$, $ClO_3^-$, $ClO_4^-$, $Br^-$, $I^-$, $IO_3^-$, $CN^-$, $OCN^-$, $NO_2^-$, $NO_3^-$, $HCO_3^-$, $CO_3^{2-}$, $S^{2-}$, $SH^-$, $HSO_3^-$, $SO_3^{2-}$, $HSO_4^-$, $SO_4^{2-}$, $S_2O_2^{2-}$, $S_2O_3^{2-}$, $S_2O_4^{2-}$, $S_2O_5^{2-}$, $S_2O_6^{2-}$, $S_2O_7^{2-}$, $S_2O_8^{2-}$, $H_2PO_2^-$, $H_2PO_4^-$, $HPO_4^{2-}$, $PO_4^{3-}$, $P_2O_7^{4-}$, $(C_nH_{2n-1}O_2)^-$, $(C_{n+1}H_{2n-2}O_4)^{2-}$ where n = 1-20 and their mixed salts and mixtures,

$A^+$ is the valence of the cation,

$B^-$ is the valence of the anion and

a and b are integers,

with the proviso that the compound is electrically neutral.

2. (Twice Amended) A process as claimed in claim 1, wherein the metal salt $M^{(A+)}{}_aX^{(B-)}{}_b$ is selected such that:

$M^{(A+)} = Li^+$, $Na^+$, $K^+$, $Mg^{2+}$, or $Ca^{2+}$, and

$X^{(B-)} = F^-$, $Cl^-$, $Br^-$, $I^-$, $NO_3^-$, $HCO_3^-$, $CO_3^{2-}$, $HSO_4^-$, $SO_4^{2-}$, $H_2PO_4^-$, $HPO_4^{2-}$, $PO_4^{3-}$, $(C_nH_{2n-1}O_2)^-$, or $(C_{n+1}H_{2n-2}O_4)^{2-}$ where n = 1-20

and their mixed salts and mixtures, where

$A^+$ is the valence of the cation,

$B^-$ is the valence of the anion and

a and b are integers,

with the proviso that the compound is electrically neutral.

5. (Amended) A process as claimed in claims 1 or 2, wherein the metal salt is used in an amount of from 0.1 to 50 ppm, based on the compound having at least two active hydrogen atoms.

6. (Twice Amended) A polyurethane produced according to any one of the processes as claimed in claims 1 or 2.

7. (Twice Amended) A flexible polyurethane foam produced according to any one of the processes as claimed in claims 1 or 2.

8. (Twice Amended) A polyether alcohol comprising the reaction product of H-functional compounds with alkylene oxides using multimetal cyanides as catalysts comprising at least one metal salt of the formula

$M^{(A+)}_aX^{(B-)}_b$, where

M is selected from at least one of $Li^+$, $Na^+$, $K^+$, $Rb^+$, $Cs^+$, $Be^{2+}$, $Mg^{2+}$, $Ca^{2+}$, $Sr^{2+}$, and $Ba^{2+}$,

X is selected from at least one of $F^-$, $Cl^-$, $ClO^-$, $ClO_3^-$, $ClO_4^-$, $Br^-$, $I^-$, $IO_3^-$, $CN^-$, $OCN^-$, $NO_2^-$, $NO_3^-$, $HCO_3^-$, $CO_3^{2-}$, $S^{2-}$, $SH^-$, $HSO_3^-$, $SO_3^{2-}$, $HSO_4^-$, $SO_4^{2-}$, $S_2O_2^{2-}$, $S_2O_3^{2-}$, $S_2O_4^{2-}$, $S_2O_5^{2-}$, $S_2O_6^{2-}$, $S_2O_7^{2-}$, $S_2O_8^{2-}$, $H_2PO_2^-$, $H_2PO_4^-$, $HPO_4^{2-}$, $PO_4^{3-}$, $P_2O_7^{4-}$, $(C_nH_{2n-1}O_2)^-$, $(C_{n+1}H_{2n-2}O_4)^{2-}$ where n = 1-20 and their mixed salts and mixtures,

$A^+$ is the valence of the cation,

$B^-$ is the valence of the anion and

a and b are integers,

with the proviso that the compound is electrically neutral.